In response to NPR
EB Docket No 06-119

Recommendations of the Independent Panel
Reviewing the Impact of Hurricane Katrina on
Communications Networks

Submitted by
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I am responding to this NPR as a private citizen who has worked in the communications field for over 30 years. My response has nothing to do with my current or past employers nor with any of my clients.
I possess a General Radiotelephone License and have worked on Broadcast, Satellite, Two Way and Fiber networks. I will confine my comments to suggestions based on my experiences in the above industries.

Relying on voluntary consensus recommendations for enhancing readiness.
Industry leaders have long advocated for backups and standby equipment for those who really want to be prepared for any disaster. The problem is economics
and deregulation. If it is not required and brings no economic benefit most businesses WILL NOT spend a dime on backup anything. The one exception to this is what most people recognize doing in this digital age..computer back ups.

Witness the mess after the ice storms in Maine in 1998. Radio stations off the air
because of no back up power. Citizens without telephones because they only had
cordless phones.

Conversely, after the attacks of 2001 the broadcasters in NYC found ways to get
back on the air in days, not weeks, by relying on friendships, phone calls and manufacturers wanting to do their part to help get broadcasters back on the air.

Suggestion: A mandatory requirement that licensees have some sort of plan in place
to restore service for their licenses. The plan could be as simple as a Memorandum
of Understanding (MOU) with vendors to provide on short notice a total replacement
system or parts that are needed to restore service. If a licensee has more equipment
then they could have a percentage of spare or spoken for parts/systems.

For systems operators they need not have a one for one replacement but enough parts
in a region to restore 20% within 24 hours.

Readiness Checklist
Radio based systems typically operate on mountains and on top of buildings so they
have special needs to restore service. Access is generally limited so they need to
have a means to gain access when roads are out and building power won't be restored

for days. Even locations that can typically be accessed easily should have some plan
good enough for a worst case disaster. Flooding, trees down, snows and wires crossing
roads all are things that have been experienced in the past 10 years.

A readiness checklist must include essentials such as back up power and fuel to run
that back up. Solar power can be utilized if battery banks can be kept on site.
Business continuity planning has been touted via many mediums but once again
ECONOMICS drive business plans. Businesses are at the edge of profit today and
won't spend on something that only happens once in a hundred years. Getting businesses
to pool resources for back up would be an economical answer to preparation.
The old Bell System network utilized regional restoration planning so items could
be brought into a region hit by disaster and services could be turned back up in short
order. Take that thinking to the 21st century and if collectively service providers put
into a pot for restoration, services could be returned by keeping stores of equipment
on a common checklist. Anyone who had damaged equipment could draw on the
cache if they had bought in to it. If they had not they would then pay the collective
what the market price would be as their penalty.

Training is something we don't have time, money and personnel to do in any fashion
that would adequately show us how it would work if the real thing hit. Having plans
that are top heavy and too wordy will rest on shelves and be ignored.

An annual "big disaster" does show us how we can work together and help our
competitor get back on their feet. Years ago we hated the competition but if they
went off the air we all dove in to get them back on because it wouldn't mean anything
if you were number 1 in a 1 station market. It is time to bring that spirit back and
reward businesses who embrace it.

Regulatory issues:

A big ticket item is the regulatory issues that the commission can directly address.
In ANY federally declared disaster area ALL regulations should be AUTOMATICALLY
relaxed WITHOUT the need to file anything or call anyone. Adequate documentation
should be kept of actions taken to restore service. Quite often power levels cannot
be attained immediately but some service can be restored by putting up temporary
antennae, using lower power transmitters and using older equipment that does not
meet current standards. As a one week or until correct equipment placement this
can make a life safety difference in some small towns.

This would have to be a very tightly written rule that might have different specifications in different markets. ie in a rural area like Maine going to quarter power, on frequency but with a wideband signal might not cause interference
to the co-channel licensees…but in Metro NYC this could not work. The only allowance might be utilizing any power up to licensed level without any change
in emissions. For TV broadcasters just putting up an analog audio signal can get information out to the public. For Radio broadcasters any power level and any
antenna cut for their frequency would make signals available to news starved victims of a natural disaster.

Organizations whose primary business is not communications:

Having focus groups, industry leaders and national organizations that assist local entities would be a much better way to help those who don't normally deal with communications. The local Emergency Management Agency can and should be the source for information to help the people who will be their "customers" when disaster strikes.

Local and State Emergency management organizations are currently overworked
and understaffed so they need the help to coordinate local and regional communications.

National credentialing:

For years the FCC issued licenses for those who wanted to be technicians. Today
private industry does this in a limited capacity.
A national standard needs to be developed and agreed upon by all parties. (Local and state EMAs, Broadcasters, Public Safety dispatchers, etc)
A minimum should be picture Ids issued after a background check.
The credential should indicate types of equipment the person is qualified to work on and special skills the individual possesses.
This standard should be accepted by all states so it is readily transportable.
Once issued it is valid for 10 years and renewable with another background check.
Please remember that loads of folks are cross trained and have other credentials as well. (Fire/EMS/EMA)

Coordination of authorities:

State EMAs should have a database of service providers, service technicians, utility contacts, equipment caches and retired individuals who could serve as consultants in times of major disaster. These people should have National credentials so as to not hinder their response.

Emergency Responders:

This is a major problem area that still is the topic of discussion 25 years after being realized and first discussed. To keep any type of cache is a major undertaking. To keep one of parts is nearly impossible. It is cost prohibitive and storage space is lacking in most areas. Another problem is variance in equipment types. With 2-3 manufacturers equipment in most systems the problem is further magnified.

Technology is changing every 7 years so parts are obsolete way too fast. High ticket items are not worth stockpiling for that one in a hundred year catastrophe. Common items that could be utilized by anyone are a better solution. (Wideband antennae, spools of coax, cases of connectors, generators, Solar panels etc)
Dispatch points are even hard to have replacement parts. A new console costs 150K so to keep even one spare is cost prohibitive for all but LARGE cities. A much more reasonable solution would be a regional restoral center that have equipment that can be connected to the affected area.

Portable equipment could be transported to a pre-designated mountain top or driven in by military vehicles. Federal cache equipment could be airlifted into stricken areas if technicians can be there to receive it.

While the 700 Mhz band might work in urban areas it is a overpriced solution that is not as workable in large states that need large coverage areas. (Terrain and distance issues)
Interoperability has become such a buzzword and no one is taking the real problem to heart. With technology today radios can be programmed with neighboring towns, regional mutual aid channels, common channels to be used between services and the nationally authorized VTAC channels. For those who are in different bands (30& 800 Mhz) they can and should carry a second radio or they should bear the burden of having cross patches to communicate with those on VHF high band. To move all Police, Fire, EMS, Highway and Emergency Management to a new band would be cost prohibitive.
Instead consider moving business and industry off to 700 MHz. This will free up space for new users who may already have equipment that could be very serviceable for many years.

PSAP back ups:
Having a tertiary PSAP 200 miles away will only give you someone to talk with. It will not provide someone who knows where you are, nor could they communicate with your responders in most circumstances. Situations where a whole area is devastated will not be substantially helped by having phones answered and being told sorry we cannot send a police car or fire truck or ambulance. Automated terminals are not the answer either, they could only give directions that people could have on flashcards. (Simple first aid, how to shut off gas mains, etc)

If a regional back up PSAP could be manned in time of disaster they could fill in the gaps to a limit. When fiber lines go down and radios fail there is no way to back them up as well.

With respect to the emergency medical community it is hard enough to find VOLUNTEERS, train them, retain them and keep them licensed. Most have drills and training on a regular basis so to provide a standardized guideline would be the most beneficial. The problem is to incorporate the new guidelines into the already overburdened ritual we undergo every two to three years to remain licensed. The way to enhance the capabilities is to designate 2 EMS channels as disaster only. They can be used on a regional

basis. The limitation should be for Portable use only. This will provide a means to communicate on scene and then utilize normal communications frequencies for contact to hospitals and incoming responders/dispatchers.

Emergency Communications to the Public:
40 years ago we knew what the meaning of Conelrad or EBS was and what to do when we heard an alert. Today most people only think of it as an annoying noise. The most sorry day for EAS was September 11, 2001. NO NATIONAL alert was issued and we were under attack! Broadcasters in general have not embraced their responsibility to provide INFORMATION to the public on OUR airwaves.

In some parts of the country I hope it is taken seriously when an EAS alert is sounded. (Tornadoes)
HOWEVER, a public education by broadcasters is required to make the public realize what capabilities are built into the system.

Free SAME receivers for NOAA broadcasts that were issued to schools and nursing homes have brought some reality back to the system. But much more should be done. One big problem is people have moved to other mediums as their first line connection with the world. The internet should have some sort of alerting system so a message would flash on your computer screen when a regional alert is received. This could be accomplished via regional ISPs cooperation (either voluntary or regulatory) or having a receiver that can be connected to your computer to do the same type of notification.

"Air Raid" Sirens have come back into vogue because they Keep It Simple Stupid! For imminent disaster they still provide some sense of connection for some communities. (Emmitsburg MD) Tornadoes and Flash floods are fast moving things that warnings could be missed if you are outside away from modern technology.

I thank the commission for requesting comments and I hope that a lot of my brothers in communications, Fire and EMS come forward with other suggestions.